The 2005 Water Quality Report

Drinking Water Quality

Since 1990, California water utilities have been providing an annual Water Quality Report to their customers. This year's report covers calendar year 2004 water quality testing, and has been prepared in compliance with new regulations called for in the 1996 reauthorization of the Safe Drinking Water Act. The reauthorization charged the United States Environmental Protection Agency (USEPA) with updating and strengthening the tap water regulatory program and changed the report's due date to July 1.

USEPA and the California Department of Health Services (CDHS) are the agencies responsible for establishing drinking water quality standards. To ensure that your tap water is safe to drink, USEPA and CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The federal Food and Drug Administration (FDA) also sets regulations for bottled water.

The City of La Habra vigilantly safeguards our water supply and, as in years past, the water delivered to your home meets the standards required by the state and federal regulatory agencies. In some cases, the City goes beyond what is required to monitor for additional contaminants that have known health risks. For example, the City monitors groundwater for Methyl Tertiary Butyl Ether (MTBE).

Unregulated contaminant monitoring helps USEPA determine where certain contaminants occur and whether it needs to establish regulations for those contaminants.

City of La Habra
Water Department
201 E. La Habra Boulevard
La Habra, California 90633-0337

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو إيجاد شخص يفهم هذه المعلومات جيدا.
Arabic

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。
Chinese

Cé rapport contient de information importantes concernant votrea eau potable. Veuillez traduire, ou parlez avec quelqu' un qui peut le comprendre.
French

Der Bericht enthält wichtige informationen über die Wasser-qualität in Ihrer Umgebung. Der Bericht sollte entweder offiziell uebersetzt werden, oder sprechen Sie mit Freunden oder Bekannten, die gute Englischkenntnisse besitzen
German

इस रिपोर्ट में पीने के पानी के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पूछिये।
Hindi

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。
Japanese

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.
Spanish

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.
Korean

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.
Vietnamese

2005 Water Quality Report

The City of La Habra Water Department

What You Need to Know About Your Water, and How it May Affect You

Sources of Supply

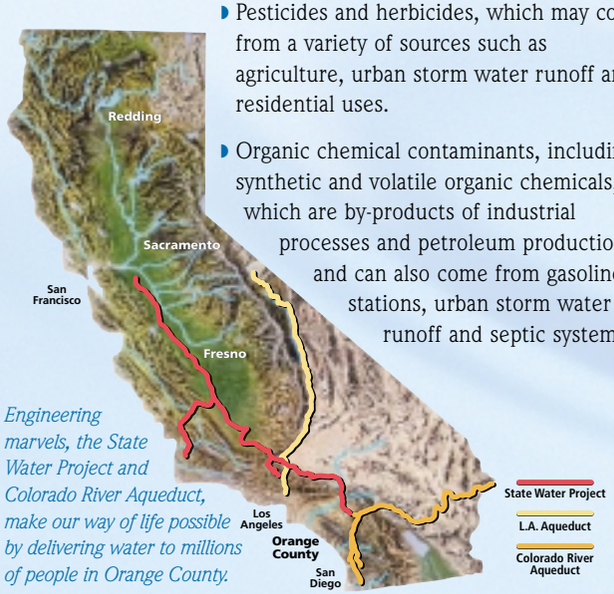
Your drinking water is a blend of surface water imported by the Metropolitan Water District of Southern California (Metropolitan), and groundwater imported from California Domestic Water Company in Whittier and one well within the City. Metropolitan's imported water sources are the Colorado River and the State Water Project, which draws water from the San Francisco-San Joaquin Bay Delta.

Basic Information About Drinking Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the layers of the ground it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production or mining activities.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff and septic systems.



Engineering marvels, the State Water Project and Colorado River Aqueduct, make our way of life possible by delivering water to millions of people in Orange County.

In order to ensure that tap water is safe to drink, USEPA and the CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may be in surface water. Metropolitan tested your surface water for *Cryptosporidium* in 2004 and did not detect it. If it ever is detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration and disinfection.

The USEPA and the federal Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's safe drinking water hotline at (800) 426-4791 between 9 a.m. and 5 p.m. Eastern Time (6 a.m. to 2 p.m. in California).

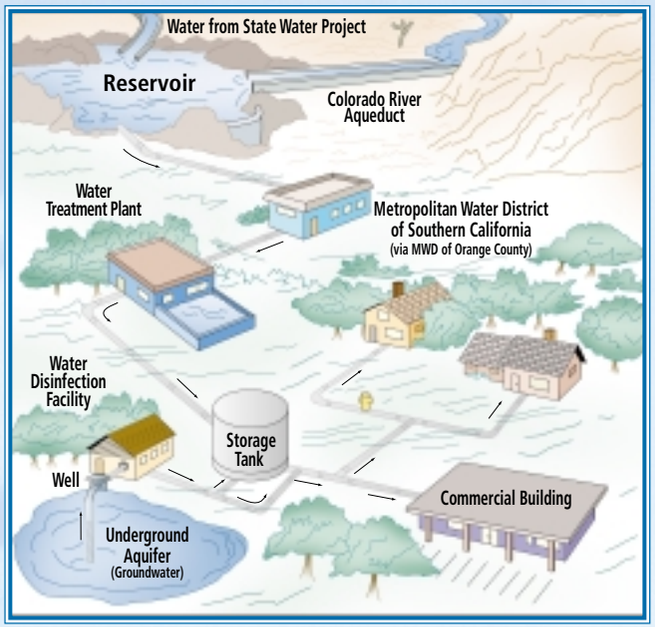
If you have any questions about your water, please contact us for answers...

For information about your water quality, or to find out about upcoming opportunities to participate in public meetings, please call Carlo Nafarrete at (562) 905-9792.

For more information about the health effects of the listed constituents in the following tables, please call the U.S. Environmental Protection Agency hotline at (800) 426-4791.

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.



Imported water — from the Colorado River and northern California — travels hundreds of miles, across deserts and mountains, to meet the needs of Orange County. Water is also pumped from local groundwater basins, then treated and sent to homes and businesses.

The Continuing Quality of Your Water is Our Primary Concern

Nitrate

The maximum allowable level of nitrate in drinking water, also called the maximum contaminant level or MCL, is 45 milligrams per liter as nitrate (mg/L as NO_3). The nitrate MCL can also be expressed as 10 milligrams per liter as nitrogen (mg/L as N). Both numbers are equivalent values. At times, nitrate in your tap water may have exceeded one-half the MCL, but it was never greater than the MCL. The following advisory is issued because in 2004 we recorded nitrate measurements in the drinking water supply which exceeded one-half the nitrate MCL.

"Nitrate in drinking water at levels above 45 mg/L (or the equivalent 10 mg/L as N) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 parts-per-million may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider."

Source Water Assessments

Import (Metropolitan) Water Assessment

In December 2002, Metropolitan Water District of Southern California completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850.

Groundwater Assessment

An assessment of the drinking water sources for City of La Habra Water Department was completed in December 2002. The sources are considered most vulnerable to the following activities associated with contaminants not detected in the water supply: Body shops, gas stations, machine shops, metal plating/finishing/fabricating, repair shops, and sewer collection systems.

A copy of the complete assessment is available at Department of Health Services Office of Drinking Water, Santa Ana District, 28 Civic Center Plaza Room 325, Santa Ana, CA 92701. You may request a summary of the assessment by contacting the City of La Habra Water Department at (562) 905-9792.

Want Additional Information?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general. Some good sites — both local and national — to begin your own investigation are:

Municipal Water District of Orange County
www.mwdoc.com

Orange County Water District
www.ocwd.com

Metropolitan Water District of Southern California
www.mwdh20.com

California Department of Health Services, Division of Drinking Water and Environmental Management
www.dhs.cahwnet.gov/ps/ddwem

U.S. Environmental Protection Agency
www.epa.gov/safewater/

Table Definitions

AL (Action Level): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (2nd MCL) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard or PDWS: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variance: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

n/a: Not applicable.

NS: No standard established.

NTU (nephlometric turbidity units): Measurement of the clarity, or turbidity, of water.

pCi/L (picocuries per liter): A measure of the natural rate of radioactive disintegration.

micromhos/cm (micromhos per centimeter): A measure of electrical conductance.

Measurements: Water is sampled and tested throughout the year. Contaminants are measured in parts per million (ppm), parts per billion (ppb), parts per trillion (ppt), and even parts per quadrillion (ppq). If this is difficult to imagine, think about these comparisons:

Parts per million (mg/L):	*Parts per billion (µg/L):*
• 1 second in 12 days	• 1 second in 32 years
• 1 penny in $10,000	• 1 penny in $10 million
• 1 inch in 16 miles	• 1 inch in 16,000 miles

It is important to note, however, that even a small concentration of certain contaminants can adversely affect a water supply.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

2004 City of La Habra Local Groundwater Quality

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Radiologicals							
Alpha Radiation (pCi/L)	15	n/a	1.6	ND – 2.3	No	2003	Erosion of Natural Deposits
Inorganic Chemicals							
Fluoride (ppm)	2	1	0.49	0.49	No	2003	Erosion of Natural Deposits
Secondary Standards*							
Chloride (ppm)	500*	n/a	130	130	No	2003	Erosion of Natural Deposits
Iron (ppb)	300*	n/a	140	140	No	2003	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	1	1 – 2	No	2004	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	1,400	1,400	No	2003	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	220	220	No	2003	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	333	333	No	2003	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.1	0.4	No	2004	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring							
Boron (ppm)	Not Regulated	n/a	0.5	0.5	n/a	2003	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	86	86	n/a	2003	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	24	24	n/a	2003	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	8.1	7.5 – 9.0	n/a	2004	Erosion of Natural Deposits
Potassium (ppm)	Not Regulated	n/a	4.8	4.8	n/a	2003	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	180	180	n/a	2003	Erosion of Natural Deposits
Total Alkalinity (ppm as $CaCO_3$)	Not Regulated	n/a	300	300	n/a	2003	Erosion of Natural Deposits
Total Hardness (ppm as $CaCO_3$)	Not Regulated	n/a	300	300	n/a	2003	Erosion of Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable;
< = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal
µmho/cm = micromho per centimeter; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

2004 City of La Habra Imported Groundwater Quality

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Radiologicals							
Alpha Radiation (pCi/L)	15	n/a	<3	ND – 6.0	No	2003	Erosion of Natural Deposits
Organic Chemicals							
N-Nitrosodimethlyamine (ppt)	n/a	n/a	1.9	ND – 5.3	No	2004	Industrial Discharge
Trichloroethylene TCE (ppb)	5	0.8	<0.5	ND – 1.4	No	2004	Industrial Discharge
Inorganic Chemicals							
Arsenic (ppb)	50	0.004	2.4	ND – 3.5	No	2004	Erosion of Natural Deposits
Barium (ppm)	1	2	0.19	0.19	No	2004	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.29	0.29 – 0.30	No	2004	Erosion of Natural Deposits
Nitrate (ppm as NO_3)	45	45	21	18 – 24	No	2004	Fertilizers, Septic Tanks
Nitrate + Nitrite (ppm as N)	10	10	4.4	4.3 – 4.5	No	2004	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	21	21	No	2004	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	1	1	No	2004	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	470	470	No	2004	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	36	36	No	2004	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	290	290	No	2004	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.1	0.1 – 0.5	No	2004	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring							
Bicarbonate (ppm)	Not Regulated	n/a	200	200	n/a	2004	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	210	210	n/a	2004	Erosion of Natural Deposits
Hexavalent Chromium (ppb)	Not Regulated	n/a	2.0	ND – 3.6	n/a	2001	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	69	68 – 69	n/a	2004	Erosion of Natural Deposits
Perchlorate (ppb)	Not Regulated	n/a	<4.0	ND – 4.0	n/a	2004	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	7.7	7.5 – 8.1	n/a	2004	Erosion of Natural Deposits
Potassium (ppm)	Not Regulated	n/a	3.8	3.7 – 3.8	n/a	2004	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	12	12	n/a	2004	Erosion of Natural Deposits
Total Alkalinity (ppm as $CaCO_3$)	Not Regulated	n/a	170	170	n/a	2004	Erosion of Natural Deposits
Total Hardness (ppm as $CaCO_3$)	Not Regulated	n/a	210	210	n/a	2004	Erosion of Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; pCi/L = pico curies per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable;
MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; < = less than the required reporting limit; µmho/cm = micromho per centimeter;
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

City of La Habra Distribution System Water Quality

	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	17	ND – 75	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	14	ND – 43	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	0.9	0.1 – 2.4	No	Disinfectant added for treatment
Odor (threshold odor number)	3*	1	1 – 3	No	Erosion of natural deposits
Turbidity (ntu)	5*	0.1	0.1 – 0.4	No	Erosion of natural deposits

Twenty locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids, and thirty monthly for color, odor and turbidity.
MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color)

Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Health Goal	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Lead (ppb)	15	2	5	0 / 27	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.17	0.24	0 / 27	No	Corrosion of household plumbing

The most recent set of lead and copper samples was collected from 27 selected residences in 2003. Lead was detected in 3 homes.
Lead did not exceed the action level. Copper was detected in 19 residential samples; none of which exceeded the copper action level.
A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

2004 Metropolitan Water District of Southern California Treated Surface Water

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2003						
Beta Radiation (pCi/L)	50	n/a	4.1	ND – 5.9	No	Decay of man-made or natural deposits
Uranium (pCi/L)	20	0.5	<2	ND – 2.6	No	Erosion of natural deposits
Inorganic Chemicals – Tested in 2004						
Fluoride (ppm)	2	1	0.18	0.14 – 0.20	No	Erosion of natural deposits
Nitrate and Nitrite as N (ppm)	10	10	0.5	ND – 0.8	No	Agriculture runoff and sewage
Nitrate as N (ppm)	10	10	0.5	ND – 0.8	No	Agriculture runoff and sewage
Secondary Standards* – Tested in 2004						
Chloride (ppm)	500*	n/a	87	76 – 110	No	Runoff or leaching from natural deposits
Color (color units)	15*	n/a	2	1 – 3	No	Runoff or leaching from natural deposits
Corrosivity (LSI)	non-corrosive	n/a	0.18	0.03 – 0.29	No	Elemental balance in water
Odor (odor units)	3*	n/a	1	1	No	Naturally occurring organic materials
Specific Conductance (µmho/cm)	1,600*	n/a	749	644 – 877	No	Substances that form ions in water
Sulfate (ppm)	500*	n/a	138	92 – 194	No	Runoff or leaching of natural deposits
Total Dissolved Solids (ppm)	1,000*	n/a	435	370 – 521	No	Runoff or leaching of natural deposits
Turbidity (NTU)	5*	n/a	0.05	0.04 – 0.08	No	Runoff or leaching of natural deposits
Unregulated Chemicals - Tested in 2004						
Alkalinity (ppm)	Not Regulated	n/a	89	76 – 98	n/a	Runoff or leaching from natural deposits
Boron (ppb)	Not Regulated	n/a	130	130 – 140	n/a	Runoff or leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	40	31 – 48	n/a	Runoff or leaching from natural deposits
Hardness, total (ppm)	Not Regulated	n/a	179	139 – 210	n/a	Runoff or leaching of natural deposits
Hardness, total (grains/gal)	Not Regulated	n/a	10	8.1 – 12	n/a	Runoff or leaching of natural deposits
Magnesium (ppm)	Not Regulated	n/a	19	15 – 22	n/a	Runoff or leaching from natural deposits
pH (pH units)	Not Regulated	n/a	8.2	8.1 – 8.2	n/a	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	3.5	3.0 – 4.0	n/a	Runoff or leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	80	74 – 94	n/a	Runoff or leaching from natural deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; µmho/cm = micromhos per centimeter;
ND = not detected; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal;
PHG = California Public Health Goal; n/a = not applicable; LSI = Langelier Saturation Index; *Contaminant is regulated by a secondary standard.

Turbidity - combined filter effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.1	No	Soil run-off
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil run-off

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a treatment technique. A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.